ENGLISH

# DTS

## Digital to Substrate Printer

# *Quick Start Guide*

# Unpack

Your Azon DTS is a very large piece of equipment and it is shipped in a sturdy crate with bracing to hold delicate components in place. Unpack your printer with care and please retain all shipping materials.

The printer and shipping crate combined weigh close to 165 kg. Because of the bulk of the machine, this is a MINIMUM TWO PERSON lift. In addition, DO NOT attempts to lift the machine from the crate with less than two people.

# Accessories and Printer (Starter Kit)

USB cable

Chip Resetter

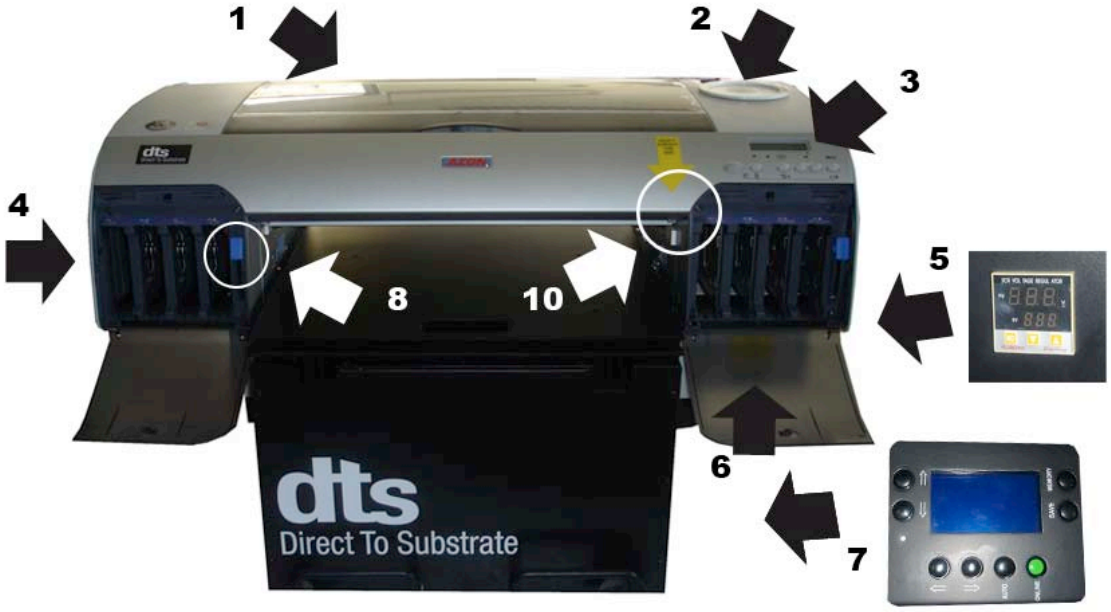
Power cable 2X

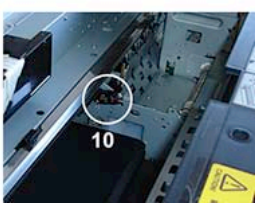
Documentation, Printer driver

Calibration White Plate 2x

Sealed ink cartridges

Cleaning sticks






1. Top cover
2. Cleaning pad and head carriage access (press blue lever to release carriage)
3. LCD display panel
4. Cartridge Slot
5. IR lamp control
6. Waste container
7. Control Panel
8. Ink lever
9. Back plate with Main Power Switch, Power cord connectors, safety height switch reset button, Ethernet and USB connector
10. Material height limit sensor

# Placement of Your Printer

The DTS final destination **MUST BE A STURDY TABLE OR OTHER**

For operator comfort, we recommend the height of the platform no more than 60 cm. This table must be able to **support the full weight of your printer (80 kg).** The table MUST also be able to incorporate the entire "footprint" of the machine across its surface. NO PART of the Azon DTS should overhang an edge. Take the printer out of the box carefully and place it on a table.

# Final Unpacking Instructions

Remove the packing tape that was used to secure the low profile access lid and raise the cover.

Unscrew and remove head protection.

Release the **Green** shipping tab lock located at the base of the Print Carriage.

Remove screws to unblock table.

# Plug the Unit into AC Power

Insert the AC cord into the unit and plug the opposite end into a power strip with surge protection. Avoid plugging multiple items into the same power strip.

This machine has a main power switch, IR lamp power and a sub power switch. When using the machine, you switch all on in this sequence: first heather, then printer and last the sub power.

Use IR lamp control to turn on the lamp only during printing. At all other time IR lamp must be off.

**1**

Main power and IR lamp power switch

**2**

IR lamp control

***Use IR lamp control to turn on the lamp only during printing. At all other time IR lamp must be off.***

**3**

Sub power switch

After powering on, Non-Genuine Message appears on LCD Display.

# Non-Genuine Message on Epson LCD Screen after inserting Bulk or Sealed Ink Cartridge

Epson LCD Screen Messages

| | |
|---|---|
| Non-Genuine ▼ | Press down arrow button |
| Cartridge! May ▼ | Press down arrow button |
| Not Perform at ▼ | Press down arrow button |
| Optimum ▼ | Press down arrow button |
| Continue? ▼ | Press down arrow button |
| ◀ Yes No ▶ | Press left arrow button for Yes |
| This May Void ▲▼ | Press down arrow button |
| Epson's ▲▼ | Press down arrow button |
| Warranty Do You ▲▼ | Press down arrow button |
| Accept This? ▲▼ | Press down arrow button |
| ◀ ACPT. Decline ▶ | Press left arrow button to Accept |

After accepting the Epson LCD screen will go back to the ink levels menu. The ink cartridge that was reset with the non-genuine instructions will have a different icon then the other ink cartridges. The non-genuine ink cartridge will have an icon of an empty box.

# Preparing and Filling system with ink

Wait until the message in the LCD display shows “Ready”.

1. The Ink cartridges are numbered from 1-8. Using these numbers as a guide, place the sealed Ink cartridges into your Azon DTS and lower both blue levers to secure them in place.

2. You must perform a Power Cleaning during setup to ensure ink is proper flowing through the ink lines.

After every Power Cleaning always empty waste container. Power Cleanings are executed from the LCD Display Panel.

With the printer in *Ready* status on the LCD Display Panel located above the White ink cartridge press the RIGHT ARROW once.

Press the UP ARROW and scroll through the menu items until you come to "Maintenance." Press the RIGHT ARROW once. Press the DOWN ARROW to scroll the menu items until you come to "Power Clean." To execute a Power Cleaning, press the RIGHT ARROW once. Confirm Power Cleaning by pressing RIGHT ARROW again. Abort it with LEFT ARROW.

The LCD display will inform you of the Power Cleaning's status in percentages. At the 10% mark, the display will prompt you to move both blue levers into the UP position.

At the 20% mark, you will be prompted to move both blue levers into the DOWN position. You will again be prompted to move both levers at the 30%, 40% and 50% marks. At the 50% point, both levers will be in the DOWN position and you will not have to adjust them again during the power cleaning cycle.

Once the Power Cleaning is complete, the LCD Display will read "Ready."

Perform one more Power Cleanings.

# Connecting to the Network

Make sure you have the correct cable for connecting the printer. To connect to a network switch or hub, you need a standard RJ-45 “straight-through” network cable. To connect directly to your computer’s network interface, you need an RJ-45 crossover cable.

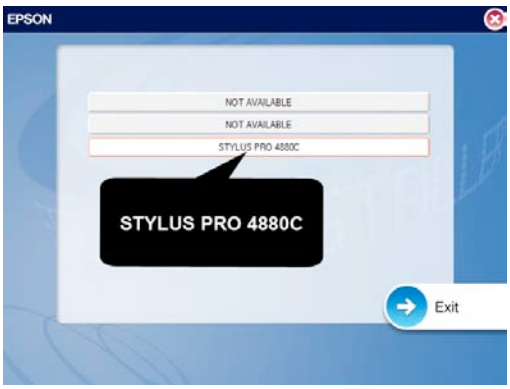
1 Connect one end of the appropriate cable to the printer’s Ethernet port. Then connect the other end to your network switch or hub or your computer’s Ethernet port.

2 Once the printer is connected to your network, you need to configure it.

# Configuring the Network Interface

A Printer Driver is software needed to make any printer function. For your Azon DTS to operate properly, you will need to install driver from DTS CD.

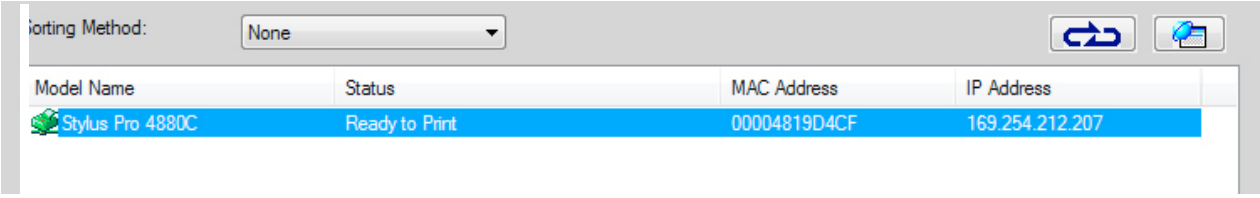
1. Run EPSetup.exe from folder Printer Driver. On Main Window select Epson Stylus Pro 4880C.




2. Select Set up the printer via a network connection

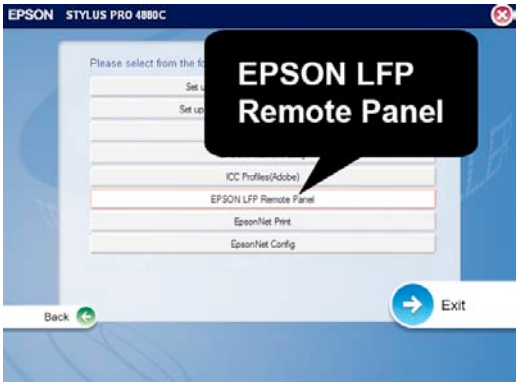
EPSON STYLUS PRO 4880C
Please select from the following items.
Set up the printer via a local connection.
Set up the printer via a network connection.
Set up the printer via a network connection
EpsonNet Config
Back
Exit

3. Select your printer and skip test page printing.



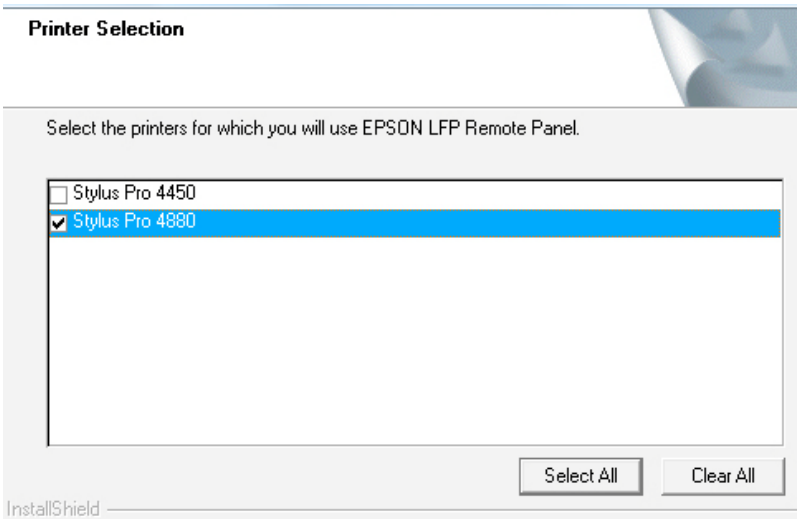

Now your Printer Driver is installed and your printer is connected to computer. Finish installation and return to main window.

4. From the main window select Epson LFP Remote Panel




The LFP Remote Panel is a standalone application designed to give you several utility functions, including the Nozzle Check and Power Cleaning utilities, right from your computer. The alignment procedure is also completed by using the Epson LFP Remote Panel.

5. Select Stylus Pro 4880




Finish installation and press exit on main window. Reboot printer.

# Print Head Alignment

In addition to the initial setup requirements, it may be necessary to perform a Print Head Alignment on other occasions such as:

- If the Print Head makes contact with *any* object
- If your prints contain vertical lines or misaligned parts of an image
- If you see banding of any kind

***Please be aware, should the Print Head make contact with ANY solid surface, it may be permanently damaged and require replacement.***

Performing a Head Alignment on an Azon DTS will require approximately 15-30 minutes. Before beginning this procedure ensure you are familiar with all the required steps, as well as having the necessary time to complete the process. Once you have begun a Head Alignment you CANNOT exit the function without shutting down the machine. In addition, early exit may result in severe misalignment of the Print Head or other operational concerns. Initial setup may require 2-3 alignment procedures to be completed.

It is necessary during setup to set and adjust the Calibration Plate to the proper height for output. In addition, should you need to raise or lower the Calibration Plate to accommodate optimum height for output, the following procedure would be used:

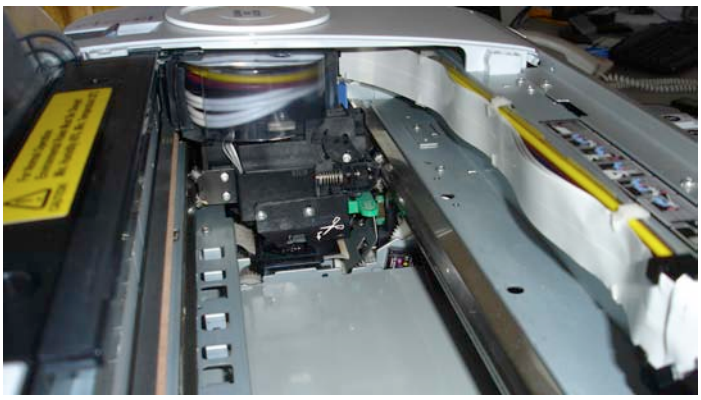
- Place the Calibration Plate on top of and to the front and right edge (facing printer) of your Plate guide. Secure Calibration Plate in place with double side tape.

- Press ↓ down button on printer control panel. This will lift plate guide with calibration plate up. Safety switch will stop plate movement. At this point calibration plate is too far from print head.
- Press memory button on printer control panel twice.
- This will continue lifting table up.

- When Calibration Plate reach maximum height, sensor return it automatically. Press memory button again to stop movement.
- For your security, check plate height manually. Lift the printer cover if it is not already. Locate the Carriage Release button press and manually move the Print Carriage until its sits near the center of Calibration Plate.

Carriage Release Button

- Use the Platen Height Adjustment arrows on Control Panel to fine tune and set Print Head clearance of approximately 2 - 3 mm. For bi-direction printing head clearance must be 2 – 3 mm.
- Slide the Print Carriage back to the capping station
- Return to the CP and press → button. This will move the Calibration Plate to the rear. Place the Platen so that it's leading edge is just inside the Printing Head Unit.



## Perform a Nozzle Check

You must print a *Nozzle Check* to ensure the Print Head is performing properly.

To initiate a *Nozzle Check:*

1. On the CP check that you are *OFFLINE*.
2. On Control Panel, press the RIGHT ARROW once and the display will read "Printer Setup." Press the DOWN ARROW once to see "Test Print."
3. Press the RIGHT ARROW button once to see "Nozzle Check." Press the RIGHT ARROW again and "Print" will appear in the display.

4. To execute the Nozzle Check, press the RIGHT ARROW button once.
    - If the *Nozzle Check* does not print correctly, perform a regular Head Cleaning. This is done by holding down the RIGHT ARROW button for 3 seconds. After the Head Cleaning has been completed, execute another *Nozzle Check.*

**Before start printing you have to perform Nozzle Check. After rebooting your printer you must also have to perform Nozzle Check prior printing.**

**Use normal white paper on the top of calibration plate for nozzle check printing.**

Perform a Print Head Alignment.

1. Ensure that the gap between the top of the Calibration Plate and the Print Head is at minimum: use the Up and Down buttons to adjust the height of the Printing Bed (with printing sheet on the Platen) Press the Online button to move the Plate to the back position.

2. The DTS can only perform one “Dot Size” at a time. You will need to reload the media a total of three times per alignment. A single Head Alignment procedure consists of 3 “Dot Sizes”.

3. On the CP check that you are *ONLINE*.

**ONLINE**

**OFFLINE**

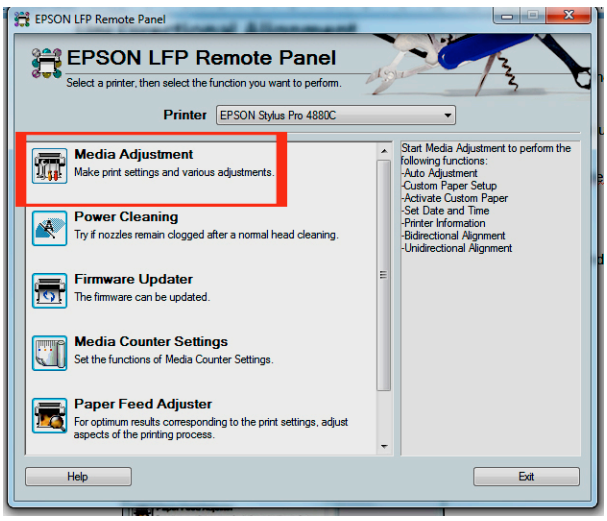
There are 2 types of alignments: Uni-Directional and Bi-Directional. Uni-Directional aligns the Print Head for printing one way (forward) across the garment, while Bi-Directional aligns the Print Head for printing forward and backward.

# Bi Directional Alignment

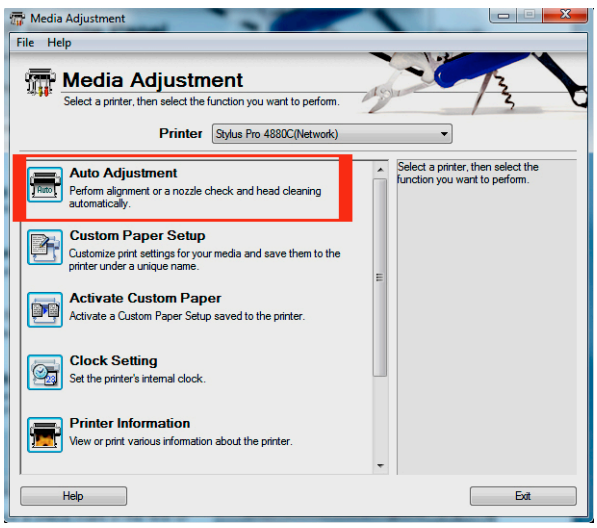
The following steps will cover sending the Print Head Alignment Test Print to the DTS through the Epson LFP Remote Panel.

1. Open the LFP Remote Panel by double-clicking on the Epson LFP icon on your Desktop.

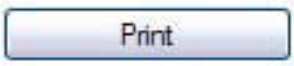
If not present, using your Start menu, select Programs > Epson > Epson LFP Remote Panel.


EPSON LFP Remote Panel
EPSON LFP Remote Panel
Select a printer, then select the function you want to perform.
Printer
EPSON Stylus Pro 4880C
Media Adjustment
Make print settings and various adjustments.
Power Cleaning
Try if nozzles remain clogged after a normal head cleaning.
Firmware Updater
The firmware can be updated.
Media Counter Settings
Set the functions of Media Counter Settings.
Paper Feed Adjuster
For optimum results corresponding to the print settings, adjust aspects of the printing process.
Start Media Adjustment to perform the following functions:
-Auto Adjustment
-Custom Paper Setup
-Activate Custom Paper
-Set Date and Time
-Printer Information
-Bidirectional Alignment
-Unidirectional Alignment
Help
Exit

2. From the main Window, select your printer from the drop down menu.
3. Next, select Media Adjustment from the list of icons in the Remote Panel window.
4. From the Media Adjustment screen select Auto Adjustment Icon.


Media Adjustment
File Help
Media Adjustment
Select a printer, then select the function you want to perform.
Printer
Stylus Pro 4880C(Network)
Auto Adjustment
Perform alignment or a nozzle check and head cleaning automatically.
Custom Paper Setup
Customize print settings for your media and save them to the printer under a unique name.
Activate Custom Paper
Activate a Custom Paper Setup saved to the printer.
Clock Setting
Set the printer's internal clock.
Printer Information
View or print various information about the printer.
Select a printer, then select the function you want to perform.
Help
Exit

5. In Auto Adjustment window select ***Other*** for Media Type, enter ***2*** for Paper Thichness and select ***Standard*** from Platen Gap drop down menu.

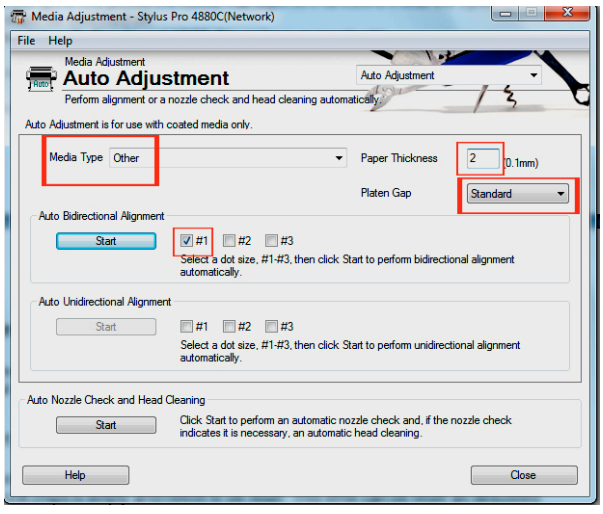



6. Within the Auto BiDirectional Alignment screens, place a check mark in the first of the three boxes ONLY, below Dot Size.You will have to repeat the entire process two ADDITIONAL times, placing check marks in Dot Size 2 the second time and Dot Size 3 the third.

**WARNING:** It is EXTREMELY crucial that you only select ONE Dot Size per printout! The DTS does not have enough calibration plate to print out all dot sizes in one run. If you do not deselect the other two check boxes, the printer will error out.

Press the Print button on the LFPRemote Panel Screen.

After the print is complete, be careful not to smudge the ink, it will be wet for a short while

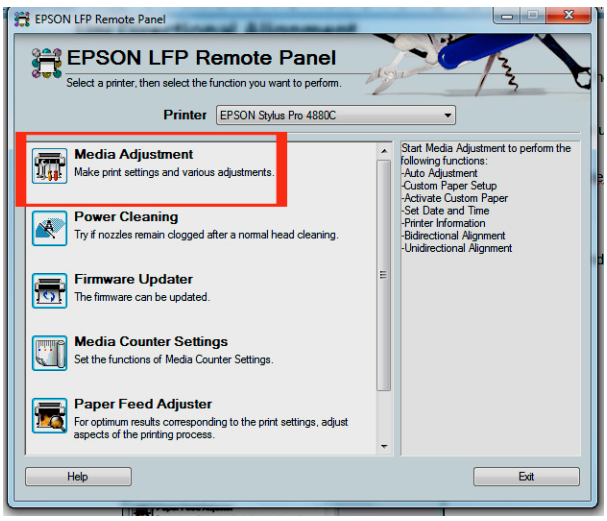


# Uni Directional Alignment

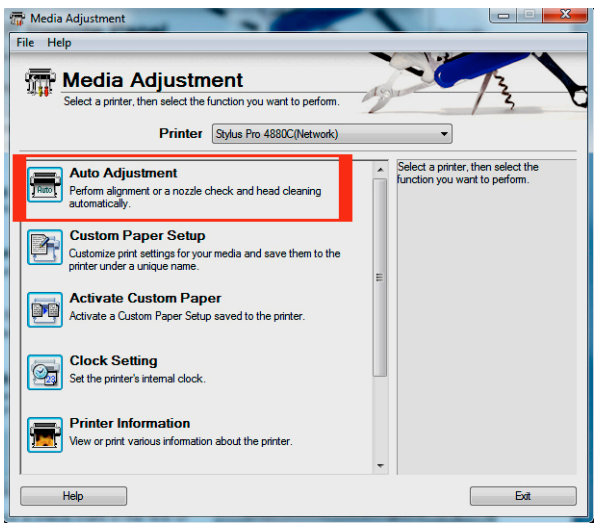
The following steps will cover sending the Print Head Alignment Test Print to the DTS through the Epson LFP Remote Panel.

1. Open the LFP Remote Panel by double-clicking on the Epson LFP icon on your Desktop.

If not present, using your Start menu, select Programs > Epson > Epson LFP Remote Panel.

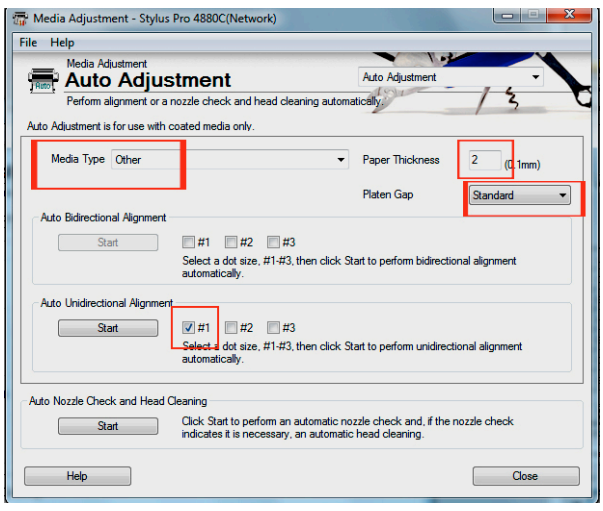

EPSON LFP Remote Panel
EPSON LFP Remote Panel
Select a printer, then select the function you want to perform.
Printer
EPSON Stylus Pro 4880C
Media Adjustment
Make print settings and various adjustments.
Power Cleaning
Try if nozzles remain clogged after a normal head cleaning.
Firmware Updater
The firmware can be updated.
Media Counter Settings
Set the functions of Media Counter Settings.
Paper Feed Adjuster
For optimum results corresponding to the print settings, adjust aspects of the printing process.
Start Media Adjustment to perform the following functions:
-Auto Adjustment
-Custom Paper Setup
-Activate Custom Paper
-Set Date and Time
-Printer Information
-Bidirectional Alignment
-Unidirectional Alignment
Help
Exit

2. From the main Window, select your printer from the drop down menu.
3. Next, select Media Adjustment from the list of icons in the Remote Panel window.
4. From the Media Adjustment screen select Auto Adjustment Icon.


Media Adjustment
File Help
Media Adjustment
Select a printer, then select the function you want to perform.
Printer
Stylus Pro 4880C(Network)
Auto Adjustment
Perform alignment or a nozzle check and head cleaning automatically.
Custom Paper Setup
Customize print settings for your media and save them to the printer under a unique name.
Activate Custom Paper
Activate a Custom Paper Setup saved to the printer.
Clock Setting
Set the printer's internal clock.
Printer Information
View or print various information about the printer.
Select a printer, then select the function you want to perform.
Help
Exit

5. In Auto Adjustment window select ***Other*** for Media Type, enter ***2*** for Paper Thichness and select ***Standard*** from Platen Gap drop down menu.

6. Within the Auto UniDirectional Alignment screens, place a check mark in the first of the three boxes ONLY, below Dot Size.You will have to repeat the entire process two ADDITIONAL times, placing check marks in Dot Size 2 the second time and Dot Size 3 the third.


Media Adjustment - Stylus Pro 4880C(Network)
File Help
Media Adjustment
Auto Adjustment
Auto Adjustment
Perform alignment or a nozzle check and head cleaning automatically.
Auto Adjustment is for use with coated media only.
Media Type
Other
Paper Thickness
2
(0.1mm)
Platen Gap
Standard
Auto Bidirectional Alignment
Start
#1 #2 #3
Select a dot size, #1-#3, then click Start to perform bidirectional alignment automatically.
Auto Unidirectional Alignment
Start
#1 #2 #3
Select a dot size, #1-#3, then click Start to perform unidirectional alignment automatically.
Auto Nozzle Check and Head Cleaning
Start
Click Start to perform an automatic nozzle check and, if the nozzle check indicates it is necessary, an automatic head cleaning.
Help
Close

**WARNING:** It is EXTREMELY crucial that you only select ONE Dot Size per printout! The DTS does not have enough calibration plate to print out all dot sizes in one run. If you do not deselect the other two check boxes, the printer will error out.

Press the Print button on the LFPRemote Panel Screen.

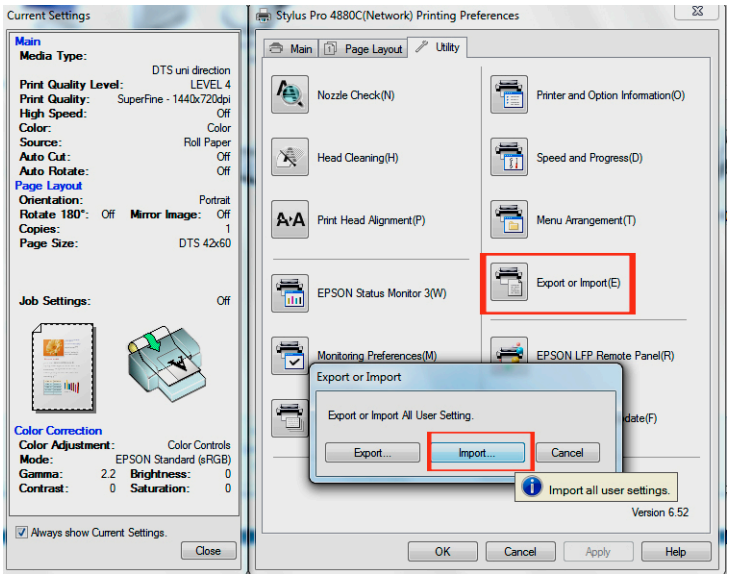
After the print is complete, be careful not to smudge the ink, it will be wet for a short while

# Printing with the Azon DTS

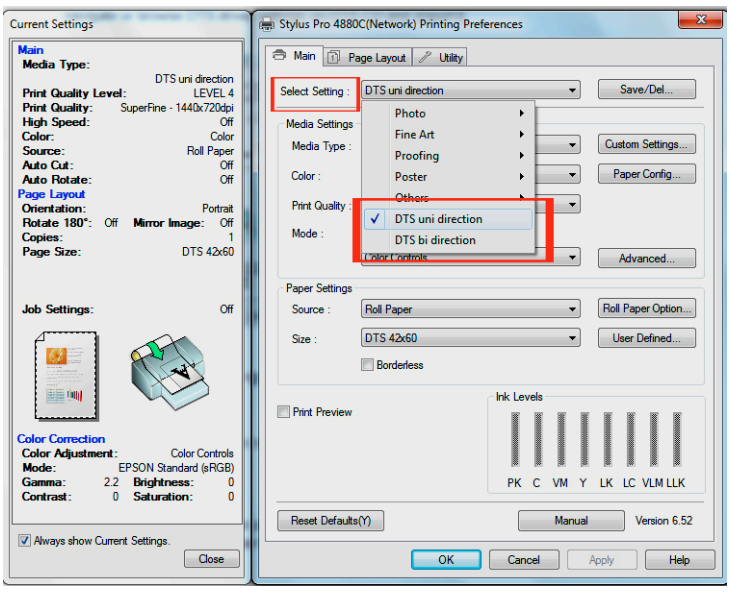
## Default settings in the printer driver

From your windows start menu choose and open “Devices and Printers”. In the upcoming window right click on the “Stylus Pro 4880C (Network)” and choose Printing Preferences.

Click on the tab “Utility”. On the following screen press Export or Import icon. Press Import tab, navigate or browse DTS driver settings on DTS CD and import it:




Select Uni or Bi printing direction, depending on printing material



## Nozzle Check

You must print a *Nozzle Check* to ensure the Print Head is performing properly. You may use common plain paper for this test.

To initiate a *Nozzle Check:*

1. Place plain paper on DTS table, taking care to align it with print head, right hand corner (as you face the front of the printer) and between sensors.

2. Adjust the Print Bed (or Platen) to the proper height for output. Press ↓ button on control panel. The Print Bed will stopped at proper height for output

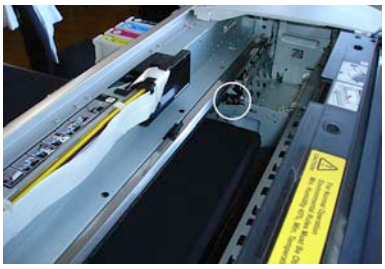
3. On the CP check that you are *OFFLINE*.
4. On Control Panel, press the RIGHT ARROW once and the display will read "Printer Setup." Press the DOWN ARROW once to see "Test Print."
5. Press the RIGHT ARROW button once to see "Nozzle Check." Press the RIGHT ARROW again and "Print" will appear in the display.
6. To execute the Nozzle Check, press the RIGHT ARROW button once.
    - If the *Nozzle Check* does not print correctly, perform a regular Head Cleaning. This is done by holding down the RIGHT ARROW button for 3 seconds. After the Head Cleaning has been completed, execute another *Nozzle Check.*

## Print Position and Head Height Adjustment

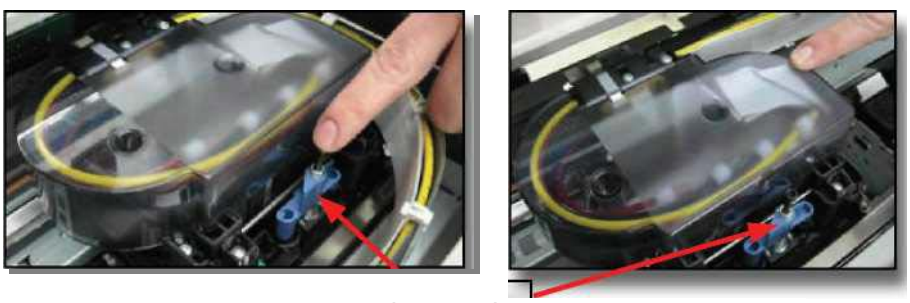
It is necessary during setup to adjust the Print Bed (or Platen) to the proper height for output. In addition, should you need to raise or lower the Platen to accommodate different material heights, the following procedure would be used:

The print does always start from the front end of the machine bed. Internal sensors position the printer and guarantee that the images will always be printed in the same position.

To find out where the objects must be placed, it is necessary to pre print on paper. This print out can be used to accurately position the print items or trays with your prepared media.



- For print head height adjustment always place material your wanna print near the sensor mark with yellow arrow.
- Press down arrow ↓ button on control panel. This will lift table up. The sensor will automatically stop table movement at right distance from print head.
- For your security check table height manually. Lift the printer cover if it is not already. Locate the Carriage Release button press and manually move the Print Carriage until its sits over the material for printing.



Carriage Release Button

- Use the Platen Height Adjustment arrows on Control Panel to fine tune and set a Print Head clearance of approximately 2 - 3 mm. For bi-direction printing head clearance must be 2 – 3 mm.
- Slide the Print Carriage back to the capping station

## Preheating Materials for Print

Once the material is positioned and ready for printing, it is necessary to preheat some materials.

Adjust IR lamp according to recommended settings in table. When IR lamp reaches desired value, preheat material 30 seconds prior printing. IR lamp should me on during printing.  After printing turn IR lamp immediately.

**IR lamp must be turned off after every print.**

| | Material Needs Primer | Printing Resolution and Direction | IR Lamp Settings (depending of material thicknes) | Post prining Material Fixation |
|---|---|---|---|---|
| Acrylic acid resin | no | 1440*720 dpi bi | 20 | no |
| ABS resin | no | 1440*720 dpi bi | 20 | no |
| Polycarbonate | no | 1440*720 dpi bi | 20 | no |
| PET | no | 1440*720 dpi bi | 20 | no |
| Vinyl | no | 1440*720 dpi bi | 20 | no |
| Plastic Corrugated Cardboard | no | 1440*720 dpi bi | 20 | no |
| Aluminum Compound Plate | yes | 1440*720 dpi bi | 20 | yes for better abrassion resistance |
| Soft Wrapping Materials | no | 1440*720 dpi bi | 20 | no |
| Other Resin | no | 1440*720 dpi bi | 20 | no |
| Aluminum Plate | yes | 1440*720 dpi bi | 20 | |
| SUS | no | 1440*720 dpi bi | 20 | yes for better abrassion resistance |
| Brass | no | 1440*720 dpi bi | 20 | yes for better abrassion resistance |
| Paper and Corrugated Cardboard | no | 1440*720 dpi bi | 20 | |
| Leather Skin | no | 1440*720 dpi bi | 20 | no |
| Building Materials | no | 1440*720 dpi bi | 20 | no |
| Wood | no | 1440*720 dpi bi | 20 | no |
| Glass | no | 1440*720 dpi uni | 20 | yes for better abrassion resistance |
| Aluminum-Plastic Composite Board | no | 1440*720 dpi bi | | yes for better abrassion resistance |
| Anodized Aluminium | no | 1440*720 dpi bi | | Salt Bath |
| Stainless Steal | no | 1440*720 dpi uni | | yes for better abrassion resistance |

## How to print using Windows or Mac applications

When the material is ready for printing you can use the print dialog from your Windows or Mac application (e.g. Photoshop, CorelDraw or Illustrator) to start the printing process. Follow the on screen instructions to start the print out.

## A Word about Resolutions, Speed and Quality

The resolution you choose will not only determine print quality, but print speed as well. If you use a lower resolution Print Mode, you will achieve a much faster print speed, but may not get the quality needed for photo images. Lower resolutions apply fewer ink dots per inch (DPI), which allows the Print Head to move much faster.

If you use higher resolution Print Modes, you will notice a decrease in print speed but an improvement in image quality. A higher DPI increases print quality by increasing the density of the dots per inch. Therefore, we recommend a lower resolution for cartoon images, but a higher resolution for photo type images.

## When a Printing Job Is Finished

We recommend using Acrylic or Urethane post treatment compatible with Azon DTS Ink.